

Flood Control District
Capital Projects

MEMORANDUM



Harris County
Flood Control District

9900 Northwest Freeway
Houston, Texas 77092
713 684-4000

DATE: May 14, 2010

TO: Arthur L. Storey, Jr., P.E.
Harris County Public Infrastructure Dept.

FROM: Michael D. Talbott, P.E. *MDT*
Director

RE: June 2010 – Capital Improvement Program Review

Key Findings and Recommendations

- It is recommended that Commissioners Court approve the list of projects to be pursued from currently available funds (\$219.5 million) as presented in Appendix A of the attached report.
- It is recommended that Commissioners Court approve the list of projects to be pursued from the pending \$170 million referenced at the FY2009-10 Mid-Year Review (September 25, 2009), as presented in Appendix C (Table 1) of the attached report. Included in Section V of the report and Appendix C (Table 1) is a quarterly schedule showing recommended timing for being able to program or encumber the \$170 million.
- Funding of the District's Capital Improvement Program (CIP) has been enhanced slightly due to the receipt of about \$19.9 million last fiscal year in grants, reimbursements, interest, and impact fees. Other income from these sources pending for this fiscal year may add about \$69.4 million to CIP funding.
- The District has currently available funding of about \$219.5 million plus the pending \$170 million, which provides a reasonable slate of projects for the next few years. However, project spending will begin to tail off rapidly in the last few years of the 5-year CIP.
- Even with the slight enhancement of CIP funding from supplemental sources (grants, reimbursements, etc.), along with the pending \$170 million, it is recommended that the District's next capital projects funding source and amount be identified and available as soon as possible. This will provide continuity in project implementation at an appropriate pace and avoid a significant gap in CIP implementation.
- It is recommended that Commissioners Court consider reliable and predictable annual funding of \$200 million for capital projects for an aggressive and appropriate program (about \$170 million from local funds and \$30 million from partnerships).

- It is recommended that the District continue with the Corps of Engineers partnership project elements programmed from currently available and pending funds. As future District CIP funding is identified and available, the pace of spending on federal projects will be evaluated with consideration of District funding capabilities and the outlook for Congressional appropriations.

Capital Projects Report

The June 2010 Capital Improvement Program Review report is attached, which includes supporting documentation for currently available and pending funds; recommendations for "active projects" to be executed from currently available funds and new projects from pending funds; supplemental projects that would be active if funding were available at recommended levels; a section on federal projects; and information regarding future projects. Also included are maps of general project locations in the county, specific project maps for select watersheds, along with photographs of hallmark projects. Many projects are providing features that endorse the multi-use concepts that the community enjoys (and now expects) from our partnership projects.

Flood Damage Reduction Overview

Funding for District-related flood damage reduction projects from all sources (spent or currently available) has totaled nearly \$1.6 billion in the past 23 years. Nearly \$1.3 billion of that amount has been provided in just the past 10 years. Included in the numbers are direct federal spending of \$209 million, federal reimbursements to the District of \$72 million, and FEMA grants of \$143 million. In addition, the District has pending funding of \$170 million identified and pending grants of about \$61.7 million.

That investment has made a tremendous difference in reducing damages from several major storm events over that period alone, plus a permanent reduction of future losses. It's estimated that this investment has saved an estimated \$2 billion in avoided damages, that would have resulted had the projects not been implemented. The major projects have also added significant opportunities for popular open space and recreational use.

Currently Available Funding – Recommended Projects

The District has "currently available funding" of about \$219.5 million. Total funding for the 5-year spending schedule shown in Appendix A includes about \$6.3 million already spent this fiscal year (March 1st through April 11th) bringing the 5-year total amount to about \$225.8 million.

Funding of the District's Capital Improvement Program (CIP) has been enhanced slightly due to the receipt of about \$19.9 million last fiscal year in grants, reimbursements, interest, and impact fees (included in the \$225.8 million 5-year spending list). Other income from these sources pending for this fiscal year may add about \$69.4 million to CIP funding (not included in the \$225.5 million 5-year spending list since not all of it is certain).

Projects recommended for funding from currently available and pending funds have been selected from the "candidate project list" presented a few years ago (plus any other identified priority projects). All projects not being pursued from currently available and pending funds have been moved into a "future projects" classification.

The list of recommended projects to execute from currently available funds is included in the attached report as Appendix A.

Pending Funding – Recommended Projects

At its September 25, 2009 Mid-Year Review, Commissioners Court indicated that "Funding for the district's capital program will be increased for an added \$170 million to continue improvements..." and that "Management Services will coordinate with the FCD director on the timing of planned capital projects."

It is recommended that Commissioners Court approve the list of projects to be pursued from the pending \$170 million as presented in Appendix C, Table 1 of the attached report. It is recommended that the District be able to program or encumber against the \$170 million according to the following schedule (Section V of attached report):

Calendar Quarter	Amount to be Programmed
4 th Quarter 2010	\$12,035,000
1 st Quarter 2011	\$54,410,000
2 nd Quarter 2011	\$26,125,000
3 rd Quarter 2011	\$27,175,000
4 th Quarter 2011	\$40,480,000
1 st Quarter 2012	\$9,775,000
Total	\$170,000,000

Recommended Projects for A Fully Funded 5-Year CIP

The District has identified projects that would be recommended for the 5-year CIP if it were fully funded to the recommended level of \$200 million per year. That gap in funding is the difference between recommended funding levels for the 5-year CIP of \$1 billion and the currently available and pending funds of \$395.8 million, or about \$600 million.

The list of recommended projects to fill out the 5-year CIP is included in the attached report in Appendix C, Table 2.

Beyond the 5-Year CIP

In addition to the 5-year CIP, the District has identified through its Watershed Master Planning process at least \$10 billion in projects. That funding would be a combination of District funds and partnerships, along with implementation by land development activities. More details on this program will be provided in future CIP review documents.

Next Funding

The District has currently available funding of about \$219.5 million plus the pending \$170 million, which provides a reasonable slate of projects for the next few years. However, project spending will begin to tail off rapidly in the last few years of the 5-year CIP.

All currently available and pending CIP funding is being directed to bringing active projects to a logical stopping point (typically, construction). Advance work for future projects (unfunded) is not being conducted (engineering, right-of-way, etc.). Most of the currently available CIP funds are being spent on land and construction related elements (86%). Once future CIP funding is identified and available, it will take a few years to gear back up for the next series of construction projects.

It is recommended that the District's next capital projects funding source and amount be identified and available as soon as possible. This will provide continuity in project implementation at an appropriate pace and avoid a significant gap in CIP implementation.

Recommended Funding Level

Reliable and predictable annual District CIP funding from all sources of about \$200 million is recommended. This represents funding from District/County sources of about \$170 million and \$30 million from other sources (primarily federal). This recommendation is based on the following considerations:

- An aggressive CIP is appropriate for the next several decades to manage and mitigate the natural threat of flooding.
- The foundation of District funding for many years to come must be the federal projects which alone can demand about \$100 million per year. These projects bring at least 50% and as much as 75-90% federal financial participation.
- At the same time, funding levels at the Federal level remain sluggish resulting in an increased pressure to manage the flooding problems with local resources. The recommended level of funding will also allow us to capitalize on partnerships with local and state governments.
- At this funding level, measured progress can be made for all project categories (federal partnerships, District main channel projects, tributary projects, major maintenance, and auxiliary projects to support local government projects).
- Even at this funding level, "capital rationing" will occur because there are more projects (and the capability to produce them) than funding allows.
- There is an increased public awareness of the flooding threat and an expressed willingness to fund effective projects to reduce the threat.
- There is support for popular multi-use and quality-of-life initiatives on District property (by appropriate sponsors) that the CIP helps enable.
- There is support from watershed and neighborhood organizations, the Greater Houston Partnership, environmental organizations, and quality-of-life interests.

II. AVAILABLE FUNDING

HCFCFCD receives funding for its projects through a combination of bond funds, cost-sharing partnership arrangements with other entities, and commercial paper. There are residual funds available from Harris County bonds issued in 2004 and in 2007. Reimbursement from cost-sharing partnerships includes our efforts with federal, state and local sponsors. In addition, HCFCFCD manages several impact fee arrangements which accommodate the development in certain watersheds for a cash fee to reimburse HCFCFCD for prior investments in building infrastructure. Funds collected through impact fees must be expended within those watersheds. The sum total of all these resources represents the total available cash for Capital Improvement Programming. For purposes of presentation, HCFCFCD has, for the past several years, presented this information as of a consistent date being April 11 of the fiscal year.

Available Cash by Fund for capital improvement projects as of April 11, 2010:

Fund	Total Cash	Encumbered	Programmed	To Be Programmed
3310 – Reimbursement	\$44,613,456	\$6,932,222	\$36,620,879	\$1,060,355
3320 – Bond	\$15,212,519	\$7,086,033	\$7,265,808	\$860,678
3330 – HCFCFCD Bond	\$43,766,438	\$3,687,603	\$38,985,316	\$1,093,519
3970 – Comm. Paper	\$87,258,340	\$13,282,356	\$73,308,462	\$667,522
FEMA Grants	\$13,454,948	\$1,352,665	\$12,102,283	\$0
Total	\$204,305,701	\$32,340,879	\$168,282,748	\$3,682,074

Available Impact Fee Funds for watersheds with an adopted regional program as of April 11, 2010:

Watershed	Total Cash	Encumbered	Programmed	To Be Programmed
Brays Bayou	\$809,605	\$34,143	\$1,578	\$773,884
Cypress Creek	\$3,782,859	\$1,806	\$384,579	\$3,396,474
Greens Bayou	\$2,125,614	\$15,500	\$161,702	\$1,948,412
Langham Creek	\$3,050,647	\$79,475	\$2,780,000	\$191,172
Sims Bayou	\$2,758,071	\$1,596,761	\$772,958	\$388,352
White Oak Bayou	\$2,652,385	\$9,739	\$0	\$2,642,646
Total	\$15,179,181	\$1,737,424	\$4,100,817	\$9,340,940

Total Available Funds from all sources as of April 11, 2010:

All Funds	Total Cash	Encumbered	Programmed	Contingency & Escalation
	\$219,484,882	\$34,078,303	\$172,383,565	\$13,023,014

While Available Funding appears to be a significant amount, it is important to realize that virtually 94% of the available funding is currently programmed against existing, identified projects, and only 6% is available for contingency and escalation.

III. PROGRAMMING OF AVAILABLE FUNDS

HCFCFCD programs available funds to specific studies and projects as approved by Harris County Commissioners Court. These may include continuing progress on multi-year mega-projects or executing studies and projects more narrow in scope. A discussion of the HCFCFCD's CIP Portfolio Management approach is presented as Appendix D.

A certain amount of flexibility in project implementation is appropriate when demand for funds exceeds the availability of funds, as is the case with flood control needs. At times throughout the year opportunities present themselves when our funding partners create possibilities to leverage project funds. To allow for such opportunities flexibility is important in programming funds to individual projects to allow for adjusting the expenditures between Program Categories as needed. As a practice, funds are only authorized against a project when it is fairly certain to complete that project with available funding.

HCFCFCD recommends programming the currently available funds to the projects in Appendix A and as summarized below (Note: Appendix A figures include FY2010-11 funds already spent as of April 11, 2010 of about \$6.3 million). Maps of programmed or "active" projects are presented in Appendix F.

Programming by Category

Category	Available Funds	Percent of Total Funds
1. Federal Flood Damage Reduction Projects	\$98,172,225	45%
2. FEMA Mitigation Grants	\$45,469,570	21%
3. Main Channel Flood Damage Reduction Projects	\$12,197,494	6%
4. Tributary Flood Damage Reduction Projects	\$35,818,076	16%
5. Major Maintenance Projects	\$0	0%
6. Flood Plain Acquisition and Preservation Projects	\$2,420,681	1%
7. Frontier Projects	\$3,189,471	1%
8. & 9. Local Participation Projects	\$9,194,351	4%
Contingency and Escalation Funds	\$13,023,014	6%
Total	\$219,484,882	100%

Programming by Activity

Activity	Available Funds	Percent of Total Funds
Feasibility Studies	\$11,829,706	5%
Project Development Phase	\$2,349,469	1%
Design Phase	\$3,608,250	2%
Right-of-Way Acquisition	\$70,166,331	32%
Utility/Pipeline Adjustments	\$10,700,307	5%
Construction Phase	\$88,496,184	40%
Turnover & Startup Phase	\$8,719,980	4%
Support Activities	\$10,591,641	5%
Contingency and Escalation Funds	\$13,023,014	6%
Total	\$219,484,882	100%

Programming by Watershed – Watershed maps in Appendix F.

Watershed	Available Funds	Percent of Total Funds
Addicks Reservoir	\$5,887,649	3%
Armand Bayou	\$776,226	< 1%
Barker Reservoir	\$59,464	< 1%
Brays Bayou	\$35,103,138	16%
Buffalo Bayou	\$2,491,113	1%
Carpenters Bayou	\$0	0%
Cedar Bayou	\$0	0%
Clear Creek	\$9,342,028	4%
Cypress Creek	\$3,233,606	1%
Galveston Bay	\$754,394	< 1%
Goose Creek & Spring Gully	\$1,268,347	1%
Greens Bayou (Without Halls Bayou)	\$17,310,275	8%
Halls Bayou	\$11,606,210	5%
Hunting Bayou	\$14,194,526	6%
Jackson Bayou	\$0	0%
Little Cypress Creek	\$158,631	< 1%
Luce Bayou	\$0	0%
San Jacinto River	\$3,397,000	2%
Sims Bayou	\$45,297,325	21%
Spring Creek	\$621,870	< 1%
Vince Bayou	\$0	0%
White Oak Bayou	\$6,222,983	3%
Willow Creek	\$996,517	1%
County Wide	\$47,740,566	22%
Contingency and Escalation Funds	\$13,023,014	6%
Total	\$219,484,882	100%

Programming by Fund

Fund	Available Funds	Encumbered	Programmed
3310 – Reimbursement	\$44,613,456	\$6,932,222	\$37,681,234
3320 – Bond	\$15,212,519	\$7,086,033	\$8,126,486
3330 – HCFC Bond	\$43,766,438	\$3,687,603	\$40,078,835
3970 – Commercial Paper	\$87,258,340	\$13,282,356	\$73,975,984
FEMA Grants	\$13,454,948	\$1,352,665	\$12,102,283
Impact Fees	\$15,179,181	\$1,737,424	\$13,441,757
Total	\$219,484,882	\$34,078,303	\$185,406,579

IV. SPENDING OF AVAILABLE FUNDS

The “active projects” table (Budget Form 413 format) in Appendix A reflects the proposed spending of currently available funds (including funds already spent this fiscal year of about \$6.3 million).

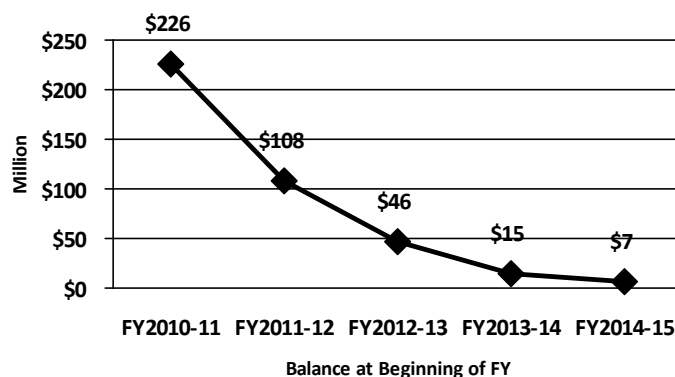
All available CIP funding is being directed to bringing active projects to a logical stopping point (typically, construction). Advance work for most future projects is not being conducted (engineering, right-of-way, etc.). Most of the currently available CIP funds are being spent on land and construction related elements. Once future CIP funding is identified and available, it will take a few years to gear back up for the next series of construction projects.

Spending of Currently Available Funds

Fiscal Year	FY Spending	Balance at Beginning of FY
2010-11	\$117,526,384	\$225,833,423
2011-12	\$62,698,740	\$108,307,039
2012-13	\$30,202,373	\$45,608,299
2013-14	\$7,951,943	\$15,405,926
2014-15	\$7,453,983	\$7,453,983
Total	\$225,833,423*	

*Note: This number includes the \$6.3 million already spent.

Drawdown of Currently Available Funds



V. PENDING FUNDS – RECOMMENDED PROJECTS AND TIMING

At its September 25, 2009 Mid-Year Review, Commissioners Court indicated that “Funding for the district’s capital program will be increased for an added \$170 million to continue improvements...” and that “Management Services will coordinate with the FCD director on the timing of planned capital projects.”

Pending Funds – Recommended Projects

The projects recommended from pending funding are influenced by the current status of projects funded under the currently available funding combined with ongoing feasibility studies and grant applications in progress. Consequently it is heavily targeted toward the ongoing investigations and designs on main channels relating to Federal programs. This includes both structural and non-structural projects. It is anticipated that some of the work on Hunting Bayou and White Oak Bayou will become candidate Federal projects towards the end of calendar year 2011 or early 2012. A number of interlocal agreements with local governments that will allow us to construct needed channel and detention basins are also anticipated to move toward final design and construction in the next year.

It is recommended that Commissioners Court approve the list of projects to be pursued from the pending \$170 million as presented in Table 1, Appendix C. The list of projects from pending funds by Project Category is shown in the following table:

Projects from Pending Funds by Category

Category	Estimated Cost	Percent of Total Cost
1. Federal Flood Damage Reduction Projects	\$27,125,000	16.0%
2. FEMA Mitigation Grants	\$21,175,000	12.4%
3. Main Stem Flood Damage Reduction Projects	\$8,500,000	5.0%
4. Tributary Flood Damage Reduction Projects	\$46,900,000	27.6%
5. Major Maintenance Projects	\$1,500,000	0.8%
6. Flood Plain Acquisition and Preservation Projects	\$13,475,000	7.9%
7. Frontier Program	\$150,000	0.1%
8. Harris County PID Support Projects	\$1,300,000	0.8%
9. Local Participation Projects	\$15,875,000	9.3%
Contingency and Escalation	\$34,000,000	20.0%
Total	\$170,000,000	100%

Projects from Pending Funds by Watershed

The list of projects from pending funds by Watershed is shown in the following table:

Watershed	Proposed Investment	Percent of Total Funds
Addicks Reservoir	\$2,150,000	1%
Armand Bayou	\$0	0%
Barker Reservoir	\$0	0%
Brays Bayou	\$20,300,000	12%
Buffalo Bayou	\$28,825,000	17%
Clear Creek	\$13,525,000	8%
Cypress Creek	\$1,200,000	1%
Galveston Bay	\$750,000	< 1%
Goose Creek	\$0	0%
Greens Bayou (Without Halls Bayou)	\$18,225,000	11%
Halls Bayou	\$6,000,000	3%
Hunting Bayou	\$875,000	< 1%
Jackson Bayou	\$0	0%
Little Cypress Creek	\$1,000,000	1%
San Jacinto River	\$1,200,000	1%
Sims Bayou	\$1,350,000	1%
Spring Creek	\$0	0%
White Oak Bayou	\$25,525,000	15%
Willow Creek	\$0	0%
County Wide	\$15,075,000	9%
Contingency and Escalation Funds	\$34,000,000	20%
Total	\$170,000,000	100%

Recommended Schedule for Programming Pending Funds

It is recommended that the District be able to program or encumber against the \$170 million according to the following schedule:

Calendar Quarter	Amount to be Programmed
4 th Quarter 2010	\$12,035,000
1 st Quarter 2011	\$54,410,000
2 nd Quarter 2011	\$26,125,000
3 rd Quarter 2011	\$27,175,000
4 th Quarter 2011	\$40,480,000
1 st Quarter 2012	\$9,775,000
Total	\$170,000,000